

### IN THE CLAIMS

Please amend the claims as follows.

For the Examiner's convenience, a list of all claims is included below.

What is claimed:

1. (Currently Amended) A method, comprising:  
operating a control node of a communication network at a packet bandwidth wherein the control node coupled to a network node is located in a communication link between at least one server and at least one client ;  
determining at least one resonance state of a performance metric that exhibits improved network performance metrics at the control node by monitoring the performance metric ~~and while~~ scanning across a range of bandwidths of the control node until the at least one resonance state ~~[[in]] of~~ the performance metrics is observed, ~~the at least one resonance state~~ indicating that one or more of the network performance metrics is optimized, and  
setting said packet bandwidth of the control node ~~to a value that corresponds to based on~~ the at least one resonance state of the performance metrics that is optimized.
2. (Previously Presented) The method of claim 1 wherein the network performance metrics comprise one or more of throughput, average fetch time and packet loss.
- 3.-4. (Canceled)
5. (Original) The method of claim 1 wherein the packet bandwidth is set by varying an inter-packet delay time over selected communication links at the control node.

6. (Currently Amended) A method, comprising:
- determining at least one resonance state of a performance metrics that exhibits an improved network performance metrics at a control node coupled to a network node inside a communication network by monitoring the performance metrics ~~and~~ while scanning across a range of bandwidths of the control node until the at least one resonance state ~~[[in]]~~ of the performance metric is observed indicating that one or more of the network performance metrics is optimized; and
- operating the control node inside the communication network at a packet bandwidth, wherein the packet bandwidth is set ~~based onto~~ a value that corresponds to the at least one resonance state of the performance metric that is optimized, wherein the control node is located in a communication link between at least one server and at least one client.
7. (Previously Presented) The method of claim 6, wherein the network performance metrics comprise one or more of throughput, average fetch time, and packet loss.
8. (Previously Presented) The method of claim 6, wherein the packet bandwidth is set by varying an inter-packet delay time over selected communication links at the control node.
9. (Currently Amended) An apparatus to control congestion in a communication network, wherein the apparatus comprises:
- a control node coupled to a network node, wherein the control node is located in a communication link between at least one server and at least one client, wherein the

control node is to determine at least one resonance state of a performance metric that exhibits improved network performance metrics, wherein the at least one resonance state is determined by monitoring the performance metric while scanning across a range of bandwidths of the control node until the at least one resonance state ~~[[in]]~~ of the performance metric is observed, the at least one resonance state indicating that one or more of the performance metrics is optimized, wherein the control node operates at a packet bandwidth, wherein the packet bandwidth is set to a value that corresponds to ~~based on~~ the at least one resonance state of the performance metric that is optimized.

10. (Previously Presented) The apparatus of claim 9, wherein the control node comprises means to determine the at least one resonance state of network performance metrics by scanning across a range of bandwidths until one or more of the network performance metrics is/are optimized.

11. (Canceled).

12. (Previously Presented) The method of claim 1, wherein said resonance state is a best observed resonance state from the at least one resonance state.

13. (Previously Presented) The method of claim 6, wherein said resonance state is a best observed resonance state from the at least one resonance state.

14. (Currently Amended) The apparatus of claim ~~[[11]]~~ 10, wherein said resonance state is a best observed resonance state from the at least one resonance state.